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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,521	10/23/2003	Nakaba Tamura	117584	6377

25944 7590 09/26/2006

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EXAMINER

NGUYEN, CAM N

ART UNIT PAPER NUMBER

1754

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/690,521		TAMURA, NAKABA	
	Examiner		Art Unit	
	Cam N. Nguyen		1754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/03/06 (an amendment/response).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 2-5 and 8-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6 and 7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on originally filed is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicants' amendments and remarks, filed on July 03, 2006, have been made of record and entered. Claim 6 has been amended.

Claims 1-18 are currently pending in this application.

Status of Withdrawn (non-elected) Claim(s)

2. Claims 2-5 & 8-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention(s), there being no allowable generic or linking claim. Election was made without traverse in the reply filed on February 08, 2006.

Claim Rejections - 35 USC § 112 (Second Paragraph)

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 & 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is considered the phrase "mesh-like cracks" in the claims renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like" or "mesh-like cracks"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). It is considered a "mesh-like cracks" is not a mesh cracks.

Claim Rejections - 35 USC § 102(b)

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 6, & 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Connolly et al., “hereinafter Connolly”, (US Pat. 5,902,363).

Connolly discloses a ceramic hot gas filter, comprising: a porous elongated filter support, said support having an outer surface, an opening at one end into a hollow interior defined in part by an inner surface, etc. said support being formed of a plurality of layers of oxide ceramic yarn, etc. said yarn is coated with first oxide ceramic material, said first oxide ceramic material providing, upon heat treatment, a porous refractory oxide support matrix; and a porous member layer contacting the outer surface of inner surface of said support, said member layer being less porous than said support and comprising (1) at least one circularly wound continuous filament oxide ceramic yarn, etc., said yarn is coated with a second oxide ceramic material, and (2) at least one ceramic filler material disposed in said gap and substantially uniformly distributed therein (see col. 20, claim 1). The membrane layer defines pores having diameters of about 0.1 to about 50 microns (see col. 20, claim 6). The first and second oxide ceramic materials each comprise Al_2O_3 (see col. 20, claim 12).

No patentable distinction seen between the claimed support material and that disclosed by Connolly, thus the claims are anticipated by the teaching of the reference.

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7. Claims 1, 6, & 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Hunter et al., "hereinafter Hunter", (US Pat. 3,799,796).

Hunter discloses a ceramic material, which is suitable for use as a catalyst support, the ceramic or refractory support material comprises a porous outer layer or coating of $\text{Al}_2\text{O}_3/\text{SiO}_2$ fibers surrounding and integrally bonded to an inner portion which may be entirely or essentially Al_2O_3 or it may include a core of metal, e.g. mild steel, stainless steel, Inconel, aluminum alloy, or other material such as a composite of metal particles in a ceramic matrix (see col. 2, ln 18-37). See also col. 1, ln 36-57 & Examples.

No patentable distinction seen between the claimed support material and that disclosed by Hunter, thus the claims are anticipated by the teaching of the reference.

8. Claims 1, 6, & 7 are rejected under 35 U.S.C. 102(b) as being anticipated by European Patent (EP 0 766 993 A2), "hereinafter EP '993".

EP '993 discloses a filter of cordierite having pores and coated with a coating layer (which can be alumina, silica, titania, mixtures thereof) (see col. 5, ln 1- col. 6, ln 59).

No patentable distinction seen between the claimed support material and that disclosed by EP '993, thus the claims are anticipated by the teaching of the reference.

9. Claims 1, 6, & 7 are rejected under 35 U.S.C. 102(b) as being anticipated by European Patent (EP 0 736 503 A1), "hereinafter EP '503".

EP '503 discloses an exhaust gas filter having a matrix with multiple pores and a

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coating layer provided on the surface of said matrix and the inner surface of the pores inside said matrix, supporting a catalyst, etc., said coating layer has communicating pores which communicate from its surface to the surface of the matrix or the inner surface of the pores inside the matrix, etc. (see col. 22, claim 15). The average pores size of said communicating pores is 10-60 um (see col. 22, claim 16).

No patentable distinction seen between the claimed support material and that disclosed by EP '503, thus the claims are anticipated by the teaching of the reference.

Response to Applicants' Arguments

10. Applicants' response filed on June 23, 2006 has been fully considered, but not deemed persuasive in view of the new ground rejection(s) and/or objection(s) above.

Examiner noted that claim 6 does not require that the surface of the metal oxide support layer having mesh-like cracks. It would appear that the claimed support material of claim 6 does not patentably distinct from the support material disclosed by the EP '503 reference.

Conclusion

11. Claims 1-18 are pending. Claims 1, 6, & 7 are rejected. Claims 2-5 & 8-18 remain withdrawn due to non-elected (distinct) invention(s). No claims are allowed.

Contacts

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cam N Nguyen, whose telephone number is

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571-272-1357. The examiner can normally be reached on M-F, 9:00 AM - 6:30 PM, at alternative work site.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Cam N. Nguyen/

Nguyen/cnn

Primary Examiner

September 17, 2006

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